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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,757	06/18/2001	David Guedalia	NMS03-05	1733

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EXAMINER
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GAUTHIER, GERALD

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/883,757

**Applicant(s)**

GUEDALIA ET AL.

**Examiner**

Gerald Gauthier

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 11-13 and 20-39 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4, 11-13 and 20-39 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. **Claim(s) 1-4, 11-13 and 20-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Augusteijn et al. (US 6,292,883 B1) in view of Saylor et al. (US 6,501,832 B1).

Regarding **claim(s) 1 and 20**, Augusteijn discloses an interactive voice response system (FIG. 2 and column 1, lines 6-9) comprising:

a compiler operative to compile documents retrieved by a fetcher into compiled document data in executable form (FIG. 1 and column 7, lines 1-44) [The converter 132 of the processor is used to convert virtual machine instructions fetched from the instruction memory by the fetching means 134 into native instructions]; and

a execution thread that executes compiled document data retrieved from the cache by the fetcher (FIG. 1 and column 7, lines 1-44) [The pre-processor 130 comprises a feeding means 136 for feeding native instructions for execution].

Augusteijn discloses storing the compiled document prior to execution but fails to disclose receipt of audio input for a given user requesting a text-based document.

However, Saylor teaches a cache which stores the compiled documents data prior to receipt of audio input from a given user requesting a text-based document (FIG. 17 and column 30, lines 45-54) [The compilation server 1708 compiles grammar fragments into binaries that are stored in the database].

Therefore, It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the processor of Augusteijn using the XML-based voice content interpreter as taught by Saylor.

This modification of the invention enables the system to have a cache which stores the compiled documents data prior to receipt of audio input from a given user so that the user would retrieve a text-based through a text-to-speech engine.

Regarding **claim(s) 2**, Saylor teaches a Storage Device, which stores state information, related to execution of the compiled documents (column 20, lines 61-67).

Regarding **claim(s) 3**, Saylor teaches a backup VoiceXML Interpreter communicating with the Storage Device, the backup interpreter providing a response to a user in the event of a failure associated with a primary voice response system (column 18, lines 59-65).

Regarding **claim(s) 4**, Saylor teaches wherein the Storage Device comprises a memory database external to the backup VoiceXML Interpreter (column 20, lines 61-67).

Regarding **claim(s) 11**, Augusteijn in combination with Saylor disclose all the limitations of **claim(s) 11** as stated in **claim 1**'s rejection above. Furthermore Saylor teaches retrieving documents encoded according to VoiceXML (column 21, lines 20-29) [The XML-based voice content interpreter is provided for compiling XML-based voice content VPages files to be executed such as VoiceXML].

Regarding **claim(s) 12**, Augusteijn discloses storing state information related to execution of the compiled document data (column 7, lines 1-44).

Regarding **claim(s) 13**, Saylor teaches providing a backup VoiceXML Interpreter that utilizes the stored state information to support continued service in the event of failure (column 20, lines 61-67).

Regarding **claim(s) 21**, Augusteijn discloses a compiler that converts the text-based document into executable speech code for storage in the cache prior to receipt of the incoming request (column 7, lines 1-44).

Regarding **claim(s) 22**, Augusteijn discloses wherein the fetcher initiates communication with a remote server to retrieve a text-based document associated with the requested information if corresponding executable code is not stored in the cache (column 7, lines 1-44).

Regarding **claim(s) 23**, Augusteijn discloses a compiler that converts the text-based document into executable speech code for storage in the cache (column 7, lines 1-44).

Regarding **claim(s) 24**, Augusteijn discloses wherein executable code stored in the cache is concurrently by multiple execution threads to provide multiple response to multiple users (column 7, lines 1-44).

Regarding **claim(s) 25**, Augusteijn discloses a storage device to store state information related to the executable code executed by the execution thread to satisfy the request for audio information associated with the incoming request (column 7, lines 1-44).

Regarding **claim(s) 26**, Augusteijn discloses wherein executable code retrieved from the cache is associated with a corresponding viewable text-based document available on the World Wide Web (column 7, lines 1-44).

Regarding **claim(s) 27**, Augusteijn discloses wherein executable thread receives the incoming call from a switchboard (column 7, lines 1-44).

Regarding **claim(s) 28**, Saylor teaches a VoiceXML interpreter (66 on FIG. 3).

Regarding **claim(s) 29**, Saylor teaches a database to store state information associated with executable code being executed by the execution thread, the state information accessible by a backup VoiceXML interpreter to provide service in the event of a failure (column 28, lines 25-29).

Regarding **claim(s) 30**, Augusteijn in combination with Saylor disclose all the limitations of **claim(s) 30** as stated in **claim(s) 1**'s rejection above. Furthermore Saylor teaches processing an incoming call (column 28, line 1 "incoming call") based on an audio input (column 28, line 2 "a voice browser") from a given user (column 28, lines 1-26) [The call center initiates a different thread for each incoming call based on a voice browser and a text to speech module for the user request]; and

identifying a request for audio information (column 28, line 1 "incoming call") associated with a text-based document (column 28, lines 1-26) [The call center initiates a different thread for each incoming call based on a voice browser and a text to speech module for the user request].

Regarding **claim(s) 31**, Saylor teaches a method, wherein searching the cache for executable code associated with the requested audio information includes:

searching amongst multiple sets of stored executable code in the cache for the executable code associated with the requested information, the multiple sets of executable code in the cache corresponding to documents previously compiled as a result of other respective users previously requesting audio information associated with the documents (column 8, lines 14-35).

Regarding **claim(s) 32**, Saylor teaches a server, wherein the compiler converts the text-based document into executable code in response to a previous request by another user for the text-based document (column 38, lines 45-54).



Regarding **claim(s) 33**, Saylor teaches a server, wherein the executable code stored in the cache is used at a later time to respond to corresponding future requests with respect to the text-based documents (column 38, lines 45-54).

Regarding **claim(s) 34**, Augusteijn in combination with Saylor disclose all the limitations of **claim(s) 34** as stated in **claim(s) 1**'s rejection above. Furthermore Saylor teaches an execution thread that processes an incoming request and, based on an audio input from a given user, identifies a request for audio information associated with a text-based document (column 31, lines 1-15).

Regarding **claim(s) 35**, Saylor teaches an interactive voice response system, wherein the corresponding executable code is stored in the cache as a result of a previous request with respect to the text-based document, the fetcher searching the cache in order to retrieve the corresponding executable code from the cache for execution of the corresponding execution code by the execution thread to satisfy the request for audio information associated with the incoming request (column 38, lines 45-54).

Regarding **claim(s) 36**, Saylor teaches an interactive voice response system, wherein the corresponding executable code is executable speech code, the interactive voice response system further comprising:

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a compiler that converts the text-based document into the executable speech code for storage in the cache prior to receipt of the incoming request (column 16, lines 55-62).

Regarding **claim(s) 37**, Saylor teaches an interactive voice response system, wherein the fetcher initiates communication with a remote server to retrieve a text-based document associated with the requested information over a network connection if the corresponding executable code were not stored in the cache (column 19, lines 12-30).

Regarding **claim(s) 38**, Saylor teaches an interactive voice response system, wherein the corresponding executable code fetched from the cache is concurrently utilized by multiple execution threads to provide a response to multiple users for requests with respect to a same text-based document (column 38, lines 45-54).

Regarding **claim(s) 39**, Saylor teaches an interactive voice response system, wherein the corresponding executable code retrieved from the cache is associated with a corresponding viewable text-based document accessible over the World Wide Web (column 8, lines 36-53).

***Response to Arguments***

5. Applicant's arguments with respect to **claim(s) 1-4, 11-13 and 20-39** have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Gauthier whose telephone number is (571) 272-7539. The examiner can normally be reached on 8:00 AM to 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**GERALD GAUTHIER**  
**PATENT EXAMINER**

g.g.  
October 14, 2005



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